

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A computer system having a plurality of partitions, comprising:

a plurality of cell boards, with each cell board including at least one main processor;
and

a service processor that is connected to each of the cell boards;

data that describes a configuration for the computer system;

wherein each partition includes at least one cell board, and the service processor manages configuration of the partitions, wherein at least one partition has at least two cell boards, and wherein the service processor and each cell board stores a copy of the data.

2. (Original) The computer system of claim 1, wherein:

each partition is running an operating system that is independent of the other partitions.

3. (Original) The computer system of claim 1, wherein:

each cell board of a partition is capable of being reassigned to another partition while the computer system is on-line.

4. (Original) The computer system of claim 1, wherein:

the service processor communicates with the cell boards via at least one USB format bus.

5. (Original) The computer system of claim 1, wherein:

each cell board may be replaced while the computer system is on-line.

6. (Original) The computer system of claim 1, wherein:

the service processor can command the operations of the cell boards.

7. (Original) The computer system of claim 1, wherein:

the service processor can command the operations of the partitions.

8. (Original) The computer system of claims 7, wherein:
the service processor can reset a partition.
9. (Original) The computer system of claim 1, wherein:
the service processor may be replaced while the computer system is on-line.
10. (Canceled)
11. (Previously Presented) The computer system of claim 1, wherein:
the data is managed by the service processor.
12. (Previously Presented) The computer system of claim 11, wherein:
information describing certain changes to the computer system are relayed to the service processor;
the service processor modifies the data to correspond to the information; and
the service processor distributes the modified data to the cell boards.
13. (Original) The computer system of claim 1, wherein each cell board includes:
a micro-controller that handles communication between the service processor and the cell board.
14. (Previously Presented) The computer system of claim 1, wherein
each partition configures itself based on the data.

15. (Previously Presented) A method for operating a computer system having a plurality of partitions and a plurality of cell boards, with each cell board including at least one main processor, wherein each partition includes at least one cell board, the method comprising:

providing a service processor that is connected to each of the cell boards;

providing data, by the service processor, that describes an initial configuration for the computer system;

storing a copy of the data in the service processor and in each cell board; and

managing configuration of the partitions via the service processor.

16. (Previously Presented) The method of claim 15, further comprising:

running an operating system on each partition that is independent of the other partitions.

17. (Previously Presented) The method of claim 15, further comprising:

reassigning a cell board of a partition to another partition while the computer system is on-line.

18. (Previously Presented) The method of claim 15, further comprising:

using at least one USB format bus to provide communications between the service processor and the cell boards.

19. (Previously Presented) The method of claim 15, further comprising:

replacing at least one cell board while the computer system is on-line.

20. (Previously Presented) The method of claim 15, further comprising:

commanding the operations of the cell boards via the service processor.

21. (Previously Presented) The method of claim 15, further comprising:

commanding the operations of the partitions via the service processor.

22. (Previously Presented) The method of claims 21, further comprising:
resetting the partition via the service processor.
23. (Previously Presented) The method of claim 15, further comprising:
replacing the service processor while the computer system is on-line.
24. (Previously Presented) The method of claim 15, further comprising:
managing the data via the service processor.
25. (Previously Presented) The method of claim 24, further comprising:
relaying information describing certain changes to the computer system to the service processor;
modifying the data to correspond to the information via the service processor; and
distributing the data to the cell boards via the service processor.
26. (Previously Presented) The method of claim 1, further comprising:
self-configuring by each partition based on the data.
27. (Previously Presented) A computer system having a plurality of partitions,
comprising:
a plurality of cell boards, wherein each partition includes at least one cell board, and
each cell board is capable of determining whether each of the other cell boards may be part of
its partition independent of the other partitions; and
a service processor that is connected to each of the cell boards via at least one bus,
wherein the service processor manages configuration of the partitions, and the service
processor and each cell board stores a copy of data that describes a configuration for the
computer system.
28. (Previously Presented) The computer system of claim 27 wherein after reset,
each cell board enters a default configuration that excludes the other cell boards from being
part of its partition.

29. (Previously Presented) The computer system of claim 28, wherein the service processor changes the default configuration of each cell board to another configuration.

30. (New) The computer system of claim 1, wherein each partition has its hardware isolated from the remaining partitions; and wherein the plurality of partitions comprises at least three partitions.

31. (New) The method of claim 15, further comprising:

providing at least three partitions, wherein each partition has its hardware isolated from the remaining partitions.

32. (New) The computer system of claim 27, wherein each partition has its hardware isolated from the remaining partitions; and wherein the plurality of partitions comprises at least three partitions.